

In the claims:

Please amend claims 1, 3, 6-9 and 11.

Please cancel claims 2, 4 and 12-29 without prejudice or disclaimer.

Please add new claims 30-72.

1. (Currently amended) Process for the amplification and quantitative real-time detection of nucleic acids, ~~characterized in that comprising~~

a) ~~using a primer is used to which a nucleic acid sequence, preferably with a length of 1 to 40 nucleotides, is attached, which codes for the sequence motif 5'-GAAA-3' (motif A) in the transcript,~~

b) ~~carrying out the amplification being carried out in the presence of an excess, preferably in a concentration of 50 to 500 nM, of a nucleic acid probe, preferably with a length of 25 to 60 nucleotides (particularly preferably approx. 50 nucleotides) which contains the sequence motif 5'-CUGANGA-3' I (motif B), a reporter molecule and a quencher molecule being attached to each probe molecule, and~~

c) ~~determining the original concentration of the nucleic acid in the sample is determined by measuring the time-dependent change in fluorescence during amplification, the relative concentration "C<sub>rel</sub>."~~

being determined according to the following formula:

$$C_{rel} = t_p / T_{Ref}$$

where

$t_p$  corresponds to the time measured for the sample from the start of amplification to the reaching of the fluorescence threshold value and

$t_{ref}$  corresponds to time measured for a reference nucleic acid of known concentration from the start of amplification to the reaching of the fluorescence threshold value.

Claim 2 (Canceled).

3. (Currently amended) Process for the amplification and quantitative real-time detection of a nucleic acid containing the sequence motif 5'-GAAA-3' (motif A), characterized in that comprising

- a) choosing the sequences of the primers used are chosen such that the sequence range a region of the nucleic acid which contains motif A is amplified,
- b) carrying out the amplification ~~being carried out~~ in the presence of an excess of a nucleic acid probe which contains the sequence motif 5'-CUGANGA-3' (motif B), a reporter molecule and a quencher molecule ~~being~~ attached to each probe molecule, and
- c) determining the original concentration of the nucleic acid in the sample is determined by measuring the time-dependent change in fluorescence during the amplification, the relative concentration "C<sub>rel.</sub>" being determined according to the following formula:

$$C_{\text{rel.}} = t_p / t_{\text{Ref.}}$$

where

t<sub>p</sub> corresponds to the time measured for the sample from the start of the amplification to the reaching of the fluorescence threshold value and

t<sub>Ref.</sub> corresponds to the time measured for a reference nucleic acid of known concentration from the start of the amplification to the reaching of the fluorescence threshold value.

Claim 4 (Canceled).

5. (Currently amended) Process according to claims 1 to 4 claim 1, characterized in that the nucleic acid is RNA, DNA or a DNA/RNA chimera.

6. (Currently amended) Process according to claims 1 to 5 claim 1 characterized in that the nucleic acid sequence attached to the primer has a length of 1 to 40 nucleotides.

7. (Currently amended) Process according to claims 1 to 6 claim 1, characterized in that the nucleic acid probe is used in a concentration of 50 to 500 nM.

8. (Currently amended) Process according to ~~claims 1 to 7~~ claim 1 characterized in that the nucleic acid probe has a length of 25 to 60 nucleotides preferably approx. 50 nucleotides.

9. (Currently amended) Process according to ~~claims 1 to 8~~ claim 1, characterized in that the amplification process is an isothermal or cyclical amplification process.

10. (Original) Process according to claim 9, characterized in that the amplification process is selected from the group consisting of NASBA<sup>®</sup>, TMA, 3SR or PCR.

11. (Currently amended) Process according to ~~claims 1 to 10~~ claim 1 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

Claims 12-29 (Canceled).

30. (New) Process according to claim 3 characterized in that the nucleic acid sequence attached to the primer has a length of 1 to 40 nucleotides.

31. (New) Process according to claim 30, characterized in that the nucleic acid probe is used in a concentration of 50 to 500 nM.

32. (New) Process according to claim 31 characterized in that the nucleic acid probe has a length of 25 to 60 nucleotides preferably approx. 50 nucleotides.

33. (New) Process according to claim 31, characterized in that the amplification process is an isothermal or cyclical amplification process.

34. (New) Process according to claim 33, characterized in that the amplification process is selected from the group consisting of NASBA<sup>®</sup>, TMA, 3SR or PCR.

35. (New) Process according to claim 31, characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler

Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

36. (New) Process according to claim 3, characterized in that the nucleic acid probe is used in a concentration of 50 to 500 nM.

37. (New) Process according to claim 36 characterized in that the nucleic acid probe has a length of 25 to 60 nucleotides preferably approx. 50 nucleotides.

38. (New) Process according to claim 36, characterized in that the amplification process is an isothermal or cyclical amplification process.

39. (New) Process according to claim 38, characterized in that the amplification process is selected from the group consisting of NASBA®, TMA, 3SR or PCR.

40. (New) Process according to claim 36 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

41. (New) Process according to claim 3 characterized in that the nucleic acid probe has a length of 25 to 60 nucleotides preferably approx. 50 nucleotides.

42. (New) Process according to claim 41, characterized in that the amplification process is an isothermal or cyclical amplification process.

43. (New) Process according to claim 42, characterized in that the amplification process is selected from the group consisting of NASBA®, TMA, 3SR or PCR.

44. (New) Process according to claim 41 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

45. (New) Process according to claim 3, characterized in that the amplification process is an isothermal or cyclical amplification process.

46. (New) Process according to claim 45, characterized in that the amplification process is selected from the group consisting of NASBA<sup>®</sup>, TMA, 3SR or PCR.

47. (New) Process according to claim 45 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

48. (New) Process according to claim 3, characterized in that the amplification process is selected from the group consisting of NASBA<sup>®</sup>, TMA, 3SR or PCR.

49. (New) Process according to claim 48 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

50. (New) Process according to claim 3 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

51. (New) Process according to claim 5 characterized in that the nucleic acid sequence attached to the primer has a length of 1 to 40 nucleotides.

52. (New) Process according to claim 51, characterized in that the nucleic acid probe is used in a concentration of 50 to 500 nM.

53. (New) Process according to claim 51 characterized in that the nucleic acid probe has a length of 25 to 60 nucleotides preferably approx. 50 nucleotides.

54. (New) Process according to claim 51, characterized in that the amplification process is an isothermal or cyclical amplification process.

55. (New) Process according to claim 54, characterized in that the amplification process is selected from the group consisting of NASBA®, TMA, 3SR or PCR.

56. (New) Process according to claim 51 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

57. (New) Process according to claim 5, characterized in that the nucleic acid probe is used in a concentration of 50 to 500 nM.

58. (New) Process according to claim 57 characterized in that the nucleic acid prob has a length of 25 to 60 nucleotides preferably approx. 50 nucleotides.

59. (New) Process according to claim 57, characterized in that the amplification process is an isothermal or cyclical amplification process.

60. (New) Process according to claim 59, characterized in that the amplification process is selected from the group consisting of NASBA®, TMA, 3SR or PCR.

61. (New) Process according to claim 57 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

62. (New) Process according to claim 5 characterized in that the nucleic acid probe has a length of 25 to 60 nucleotides preferably approx. 50 nucleotides.

63. (New) Process according to claim 62, characterized in that the amplification process is an isothermal or cyclical amplification process.

64. (New) Process according to claim 63, characterized in that the amplification process is selected from the group consisting of NASBA®, TMA, 3SR or PCR.

65. (New) Process according to claim 62, characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

66. (New) Process according to claim 5, characterized in that the amplification process is an isothermal or cyclical amplification process.

67. (New) Process according to claim 66, characterized in that the amplification process is selected from the group consisting of NASBA®, TMA, 3SR or PCR.

68. (New) Process according to claim 66 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR

69. (New) Process according to claim 5, characterized in that the amplification process is selected from the group consisting of NASBA®, TMA, 3SR or PCR.

70. (New) Process according to claim 69 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

71. (New) Process according to claim 5 characterized in that there is used, as reporter, a dye from the group consisting of FAM, HEX, TET, ALEXA, Texas Red, Light Cycler Red, IRD 700, CY-7, IRD 41 or La Jolla Blue and, as quencher, a dye from the group consisting of TAMRA, CY-5, DABCYL and LCR.

72. (New) Process according to claim 3, characterized in that the nucleic acid is RNA, DNA or a DNA/RNA chimera.